

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 9, 21, 26, 29, 35, 40, and 45 are amended. New claims 55-57 are added. Claims 1-22, 24-46, 50, 52-57 are pending in this application.

35 U.S.C. § 102

Claims 16, 19, 21, 24, 29, and 30 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,805,204 to Thompson et al. (hereinafter "Thompson"). Applicant respectfully submits that claims 16, 19, 21, 24, 29, and 30 are not anticipated by Thompson.

Thompson discloses a system in which program information or data is gathered and communicated to one or more local head end computers via satellite transmission (see, Fig. 1 and col. 4, lines 48-61). At the local head end computer, the data is formatted and transmitted over a CATV system to a decoder unit at the customer's TV set where the data can be presented on the user's TV (see, Fig. 1 and col. 4, lines 61-67). Thompson further discloses that smart cards can be used to encrypt the data at the local head end before it is transmitted to the customer's TV set, and then decrypted by the decoder unit in the customer's TV set after receipt from the local head end (see, Figs. 6 and 7, and col. 7, lines 10-14).

In contrast, with respect to claim 16, claim 16 recites:

encrypting, **at the user's home**, the media content only if the smart card is authorized to encrypt the media content.

Applicant respectfully submits that Thompson does not disclose or suggest encrypting, at the user's home, the media content only if the smart card is authorized to encrypt the media content as claimed in claim 16.

In the November 21 Office Action, it was asserted that "Thompson teaches that the decoder unit (50) of the smart card (11) encrypts and decrypts the media content that which has been received from the remote media source, that is, at user's home or the premises" (see, ¶ 9, p. 8). Applicant respectfully disagrees with this characterization of Thompson. The decoder unit 50 of Thompson is not part of the smart card 11 – the decoder unit 50 is located at the customer's premises and includes an interface 85 that allows the smart card 11 to be used with the decoder unit 50 (see, col. 6, lines 21-24, and col. 7, lines 8-14). Furthermore, the smart card 11 is used to encrypt data before it is transmitted over the system and decrypt the data after it is received at the subscriber unit 50 (see, col. 7, lines 12-14). The portions of Thompson cited in the November 21 Office Action disclose encryption of data prior to transmission to the customer and decryption of data at the customer's presence, but do not disclose encryption of data at the customer's premises. Although decryption may be performed at the decoder unit of the subscriber (see, Figs. 1 and 7), there is no disclosure of encrypting being performed at the decoder unit of the subscriber of Thompson. Thus, Applicant respectfully submits that Thompson does not disclose or suggest encrypting, at the user's home, the media content only if the smart card is authorized to encrypt the media content as claimed in claim 16.

For at least these reasons, Applicant respectfully submits that claim 16 is allowable over Thompson.

With respect to amended claim 21, amended claim 21 recites:

checking whether a smart card is authorized to decrypt the media content, wherein the smart card stores a decryption key and additional data;

determining that the smart card is authorized to decrypt the media content only if data other than electronic money or a decryption key is stored as the additional data on the smart card, wherein the data is expected to be of value to a user; and

decrypting the media content only if the smart card is authorized to decrypt the media content.

In the November 21 Office Action, it was asserted that "Thompson teaches that the smart card including the embedded key to encrypt and decrypt the media content which is not electronic money and is expected to be value to a user in order to encrypt and decrypt the media content" (see, ¶ 9, p. 8). However, in amended claim 21, the smart card stores a decryption key and additional data, and determines that the smart card is authorized to decrypt the media content only if data other than electronic money or a decryption key is stored as the additional data on the smart card. Applicant respectfully submits that the imbedded key of Thompson does not disclose or suggest a decryption key and additional data as claimed in amended claim 21.

For at least these reasons, Applicant respectfully submits that amended claim 21 is allowable over Thompson.

With respect to amended claim 29, amended claim 29 recites:

receiving media content;

encrypting the received media content based on a household identifier corresponding to a smart card, wherein the household identifier is associated with one household; and

requiring the smart card to be present to decrypt and render the media content.

In the November 21 Office Action, it was asserted that "Thompson simply provides evidence of the household identifier or embedded key corresponding to a smart card to encrypt in order to encrypt media content, that is, personnel who posses the smart card with invalid identifier or key will not be allow to have the system encrypt the media content" (see, ¶ 9, p. 9).

However, in amended claim 29, the received media content is encrypted based on a household identifier corresponding to a smart card, wherein the household identifier is associated with one household. In amended claim 29, content is encrypted specific to one household. Thus, for example, content may be broadcast by a source and then encrypted at each household using the household identifier for that household. Thus, in the method of amended claim 29, the line can be drawn of who can decrypt content on a household by household basis. In contrast, Thompson is directed to allowing all users with decoders and smartcards to decrypt the content using the same key, as Thompson discloses that each receiver must be able to use the same key to decode the data stream (see, col. 3, lines 16-18). Thus, Thompson draws the line of who can decrypt content on a "have smartcard" versus "don't have smartcard" basis, not on a per-household basis as claimed in amended claim 29.

For at least these reasons, Applicant respectfully submits that amended claim 29 is allowable over Thompson.

Given that claim 19 depends from claim 16, claim 24 depends from amended claim 21, and claim 30 depends from claim 29, Applicant respectfully submits that claims 19, 24, and 30 are likewise allowable over Thompson for at least the reasons discussed above.

Claims 34-36 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,666,412 to Handelman et al. (hereinafter "Handelman"). Applicant respectfully submits that claims 34-36 are not anticipated by Handelman.

Handelman discloses a CATV system that uses two smart cards: a main card and a parent card. If only the main card is inserted into the decoder, then no restricted programs are decrypted. If only the parent card is inserted into the decoder, then no programs at all are decrypted. If both the main card and the parent card are inserted into the decoder, then both restricted and non-restricted programs are decrypted. See, col. 7, lines 38-53. Handelman also discloses that billing data for restricted as well as non-restricted programs can also be kept in the main card (see, col. 7, lines 54-62).

In contrast, claim 34 recites:

comparing a rating corresponding to the media content to a rating associated with a smart card; and

allowing access to the media content if the rating corresponding to the media content does not exceed the rating associated with the smart card, wherein a plurality of ratings do not exceed the rating associated with the smart card.

In the November 21 Office Action, it was asserted that "Handelman clearly teaches the multiple levels of control, that is, restricted program and non-restricted program" (see, ¶ 9, p. 9). However, Applicant respectfully submits that even with this disclosure of restricted programs and non-restricted programs, Handelman still does not disclose or suggest all of the claim elements of claim 34. Using the language of claim 34, if the restricted programs of Handelman being associated with the parent card is equivalent to the rating associated with the smart card in

claim 34, then there must be a plurality of levels of control that do not exceed the "restricted programs" rating of Handelman (in order to satisfy the language "wherein a plurality of ratings do not exceed the rating associated with the smart card" of claim 34). However, as Handelman only discloses one other level of control (the non-restricted programs), Handelman does not disclose a plurality of levels of control, and thus does not disclose wherein a plurality of ratings do not exceed the rating associated with the smart card as claimed in claim 34.

For at least these reasons, Applicant respectfully submits that claim 34 is allowable over Handelman.

With respect to amended claim 35, amended claim 35 depends from claim 34 and Applicant thus submits that amended claim 35 is allowable over Handelman for at least the reasons discussed above with respect to claim 34. Furthermore, amended claim 35 recites:

wherein the comparing comprises comparing the rating corresponding to the media content to the rating associated with the smart card as stored on the smart card

In the November 21 Office Action, it was asserted that "Handelman clearly teaches the parental control is stored in the smart card" (see, ¶ 9, p. 9). Handelman, at col. 3 lines 18-23, does disclose storing billing data corresponding to viewing of programs which do not require parental control and of programs which require parental control. However, this billing data of Handelman is simply billing data for the two types of programs (those not requiring parental control and those requiring parental control). In amended claim 35, however, the rating stored on the smart is used as a basis for determining whether to allow access to media content. Applicant respectfully submits that nowhere in Handelman is there any

disclosure or suggestion of using the billing data of Handelman as a basis for determining whether to allow access to media content.

For at least these reasons, Applicant respectfully submits that amended claim 35 is allowable over Handelman.

Given that claim 36 depends from claim 34, Applicant respectfully submits that claim 36 is likewise allowable over Handelman for at least the reasons discussed above.

Applicant respectfully requests that the §102 rejections be withdrawn.

35 U.S.C. § 103

Claims 1, 2, 5-8, 12-14, 28, 31-32, 37-40, 42, 43-45, 50, and 52-53 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Handelman in view of Thompson. Claims 9-11, 20, 25-27, 33, 41, and 46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Thompson in view of Handelman. Applicant respectfully submits that claims 1, 2, 5-8, 12-14, 28, 31-32, 37-40, 42, 43-45, 50, and 52-53 are not obvious over Handelman in view of Thompson.

With respect to claim 1, claim 1 recites

a key, associated with a household, to be used to encrypt and decrypt media content associated with the household; and
a memory unit, the memory unit including,
a user-specific information storage section to store user preferences, and
a data storage section to store data that is expected to be of value to a user.

In the November 21 Office Action, it was asserted that "the billing data could contains the user preferences (i.e., adult channels, premium channels such a HBO, Showtime, etc.) as described in the paragraph 6 above, and Handelman

simply provides evidence of the storage section to store the user preferences" (see, ¶ 9, p. 10). Applicant respectfully disagrees with this assertion.

The billing data in Handelman is simply that – billing data. There is nothing in Handelman that discusses this billing data being associated with any particular user preference, or of any correlation whatsoever between the billing data of Handelman and any user preferences. By way of example, if the billing data of Handelman indicates that a user should be or has been charged for a program, this still provides no correlation with any user preferences – there is no way to know what a user's preference is based on the billing data of Handelman (e.g., the billing data provides no indication about whether the user liked, disliked, was ambivalent to, etc. a particular program – the program may have been viewed or requested because a user wanted to view it, because the user's 2-year old child got hold of the remote control and hit the correct key sequence, because a mischievous third party requested viewing of the program, because the user rolled over on the remote control while sleeping and hit the correct key sequence, etc.). Thus, Applicant respectfully submits that Handelman does not disclose or suggest a smart card with a user-specific information storage section to store user preferences as claimed in claim 1. Thompson is not cited as curing, and does not cure, these deficiencies of Handelman.

For at least these reasons, Applicant respectfully submits that claim 1 is allowable over Handelman in view of Thompson.

With respect to amended claim 9, amended claim 9 recites:

a key, associated with one particular household, to be used to encrypt and decrypt media content associated with the one particular household but not to encrypt and decrypt media content associated with other households; and

a data storage section to store data that is expected to be of value to a user.

Applicant respectfully submits that, analogous to the discussion above regarding amended claim 29, Thompson does not disclose or suggest a key, associated with one particular household, to be used to encrypt and decrypt media content associated with the one particular household but not to encrypt and decrypt media content associated with other households as claimed in amended claim 9. Handelman is not cited as curing, and does not cure, these deficiencies of Thompson. For at least these reasons, Applicant respectfully submits that amended claim 9 is allowable over Handelman in view of Thompson.

With respect to amended claim 26, amended claim 26 recites:

a plurality of smart cards, each to be used for encrypting different categories of media content; and

an encryption module coupled to receive media content and encrypt, at the user's home, the media content based on a key maintained on one of the plurality of smart cards.

Applicant respectfully submits that, analogous to the discussion above regarding claim 16, Thompson does not disclose or suggest an encryption module coupled to receive media content and encrypt, at the user's home, the media content based on a key maintained on one of the plurality of smart cards as claimed in amended claim 26. Handelman is not cited as curing, and does not cure, these deficiencies of Thompson.

Furthermore, Handelman does not disclose or suggest a plurality of smart cards, each to be used for encrypting different categories of media content as claimed in amended claim 26. As discussed above, the main card in Handelman is needed to decrypt all content (thus all categories of media content), whereas the parent card is needed to decrypt restricted content (which is one of the categories

of media content). Thus, each of the plurality of cards in Handelman is not to be used for encrypting different categories of media content as claimed in claim 26 because the main card in Handelman is needed to decrypt all content. Thompson is not cited as curing, and does not cure, these deficiencies of Handelman.

For at least these reasons, Applicant respectfully submits that amended claim 26 is allowable over Handelman in view of Thompson.

With respect to claim 38, Applicant respectfully submits that, analogous to the discussion above regarding claim 1, neither Handelman nor Thompson, individually or in combination, discloses or suggests controlling encryption of the received media content based on a household identifier corresponding to a smart card; and maintaining user preferences information on the smart card, the user preferences information being available only when the smart card is coupled to the computing device as claimed in claim 38. For at least these reasons, Applicant respectfully submits that claim 38 is allowable over Handelman in view of Thompson.

With respect to amended claim 40, Applicant respectfully submits that, analogous to the discussion above regarding claim 1 and amended claim 29, neither Handelman nor Thompson, individually or in combination, discloses or suggests a key, associated with one particular household, to be used to encrypt and decrypt media content associated with the one particular household but not to encrypt and decrypt media content associated with other households; and a user-specific information storage section to store user preferences as claimed in amended claim 40. For at least these reasons, Applicant respectfully submits that amended claim 40 is allowable over Handelman in view of Thompson.

With respect to amended claim 45, Applicant respectfully submits that, analogous to the discussion above regarding claim 1 and amended claim 29, neither Handelman nor Thompson, individually or in combination, discloses or suggests maintaining, on a smart card, information regarding a user's preferences corresponding to media content; and maintaining, on a smart card, a key to be used to encrypt and decrypt media content associated with one particular household but not to encrypt and decrypt media content associated with other households as claimed in amended claim 45. For at least these reasons, Applicant respectfully submits that amended claim 45 is allowable over Handelman in view of Thompson.

With respect to claim 50, Applicant respectfully submits that, analogous to the discussion above regarding amended claim 29, neither Handelman nor Thompson, individually or in combination, discloses or suggests limiting rendering of the media content to a network of devices to which the plurality of smart cards are coupled, wherein the network of devices is maintained within a single house as claimed in claim 50. For at least these reasons, Applicant respectfully submits that claim 50 is allowable over Handelman in view of Thompson.

Given that claims 2 and 5-8 depend from claim 1, claims 10-14 depend from amended claim 9, claim 20 depends from claim 16, claim 25 depends from amended claim 21, claims 27-28 depend from amended claim 26, claims 31-33 depend from amended claim 29, claim 37 depends from claim 34, claim 39 depends from claim 38, claims 41-44 depend from amended claim 40, claim 46 depends from amended claim 45, and claims 52-53 depend from claim 50,

Applicant respectfully submits that claims 2, 5-8, 10-14, 20, 25, 27-28, 31-33, 37, 39, 41-44, 46, and 52-53 are likewise allowable over Handelman in view of Thompson for at least the reasons discussed above.

Claims 3-4, 15, 17-18, 22, and 54 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. Handelman in view of Thompson and U.S. Patent No. 5,744,787 to Teicher (hereinafter "Teicher"). Applicant respectfully submits that claims 3-4, 15, 17-18, 22, and 54 are not obvious over Handelman in view of Thompson and Teicher.

Claims 3-4 depend from claim 1, claim 15 depends from amended claim 9, claims 17-18 depend from claim 16, claim 22 depends from amended claim 21, and claim 54 depends from claim 50. Applicant respectfully submits that Teicher is not cited as curing, and does not cure, the deficiencies of Handelman and Thompson as discussed above with reference to claims 1, 9, 16, 21, and 50. Thus, for at least these reasons, Applicant respectfully submits that claims 3-4, 15, 17-18, 22, and 54 are allowable over Handelman in view of Thompson and Teicher.

Applicant respectfully requests that the §103 rejections be withdrawn.

New Claims

New claims 55-57 are added. Each of claims 55-57 depends from claim 1, and Applicant thus respectfully submits that each of claims 55-57 is allowable over the cited references for at least the reasons discussed above with respect to claim 1. Furthermore, Applicant respectfully submits that the cited references do not disclose a smart card as recited in claim 1 wherein the user preferences comprise one or more channels preferred by the user as claimed in new claim 55, a


smart card as recited in claim 1 wherein the user preferences comprise one or more viewing times preferred by the user as claimed in new claim 56, and a smart card as recited in claim 1 wherein the user preferences comprise one or more types of content preferred by the user as claimed in new claim 57.

Conclusion

Claims 1-22, 24-46, 50, 52-57 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

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Respectfully Submitted,

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Version of Claims with Markings to Show Changes Made

9. (Amended) A smart card comprising:

a key, associated with [a] one particular household, to be used to encrypt and decrypt media content associated with the one particular household but not to encrypt and decrypt media content associated with other households; and

a data storage section to store data that is expected to be of value to a user.

21. (Twice Amended) A method of decrypting media content, the method comprising:

checking whether a smart card is authorized to decrypt the media content, wherein the smart card stores a decryption key and additional data;

determining that the smart card is authorized to decrypt the media content only if data other than electronic money or a decryption key is stored as the additional data on the smart card, wherein the data is expected to be of value to a user; and

decrypting the media content only if the smart card is authorized to decrypt the media content.

26. (Amended) A system comprising:

a plurality of smart cards, each to be used for encrypting different categories of media content; and

an encryption module coupled to receive media content and encrypt, at the user's home, the media content based on a key maintained on one of the plurality of smart cards.

29. (Amended) A method of allowing parental control over media content, the method comprising:

receiving media content;

encrypting the received media content based on a household identifier corresponding to a smart card, wherein the household identifier is associated with one household; and

requiring the smart card to be present to decrypt and render the media content.

35. (Amended) A method as recited in claim 34, wherein the [rating associated with the smart card is] comparing comprises comparing the rating corresponding to the media content to the rating associated with the smart card as stored on the smart card.

40. (Amended) A smart card comprising:

a key, associated with [a] one particular household, to be used to encrypt and decrypt media content associated with the one particular household but not to encrypt and decrypt media content associated with other households; and

a user-specific information storage section to store user preferences.

45. (Amended) A method comprising:

maintaining, on a smart card, information regarding a user's preferences corresponding to media content; and

maintaining, on a smart card, a key to be used to encrypt and decrypt media content associated with [a] one particular household but not to encrypt and decrypt media content associated with other households.